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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/076,115 05/12/98 GRUBER

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EXAMINER

TUNG, J

ART UNIT

PAPER NUMBER

1653

DATE MAILED:

01/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/076,115

Applicant(s)

Gruber et al

Examiner

Joyce Tung

Group Art Unit

1653

☒ Responsive to communication(s) filed on Oct 12, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32, and 41-43 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32, and 41-43 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Response to Amendment

Applicants' arguments, filed 10/12/99, have been fully considered but they are not deemed to be persuasive. Rejections and /or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

1. Regarding the rejection of claims 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32 and 41-43 under 103(a) over Burmer in view of Carninci et al., the response argues that one key to the claimed method is that the adaptor molecule which has one or more ligands and one or more cleavage sites also serves as the primer molecule for synthesis of the first nucleic acid molecule. The response further argues that the adaptors of Burmer are not used as primer for synthesis of a nucleic acid molecule and there is no suggestion in Carninci et al. that an ordinary skill in the art uses a primer-adaptor molecule containing both a ligand and a cleavage site for synthesis of a first nucleic acid molecule comprising the primer adaptor. Burmer discloses applying the ligation of the adaptor with a restriction site to a first nucleic acid or second nucleic acid in which the adaptor may optionally contain a ligand binding end (See column 2, lines 39-44) and both nucleic acid sequences are combined under hybridization condition (See column 2, lines 49-54). This suggests that a primer can be modified to have a restriction site and ligand binding end because the first step of amplification is that a primer hybridizes to a target nucleic acid sequence. Burmer further discloses an optional fragment amplification in which the nucleic acid fragment is

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amplified with a primer containing a ligand binding end and a sequence complementary to the adaptors (See column 2, lines 45-48). The disclosure of Burner even further suggest that an artisan of ordinary skill in the art at the time of the instant invention would have been motivated to modify the primer to have both ligand site and restriction site because the primer as taught by Burner has a sequence complementary to the adaptors which have a restriction site and the method allows isolating nucleic acid sequence (See column 1, lines 50-52). The reference of Carninci et al. is for indicating that a primer with a restriction site is used to synthesize a nucleic acid. Therefore, an artisan of ordinary skill in the art at the time of the instant invention would have combined both references by using the modified primer set forth above to make a nucleic acid molecule with a reasonable expectation of success because Burner indicates that the method provides simple and inexpensive means for isolating a nucleic acid sequence (see column 2, lines 24-25). Thus, the rejection is maintained.

2. Claims 1, 2, 6, 12, 16-20, 22, 25, 28, 29, 31, 32 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burner (5,726,022) in view of Carninci et al. (Genomics, 1996, Vol. 37, pg. 327-336).

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

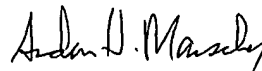
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached at (703) 308-1152.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

5. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1653 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

December 30, 1999


ARDIN H. MARSCHEL
PRIMARY EXAMINER